

RADIO COMMUNICATION SYSTEM

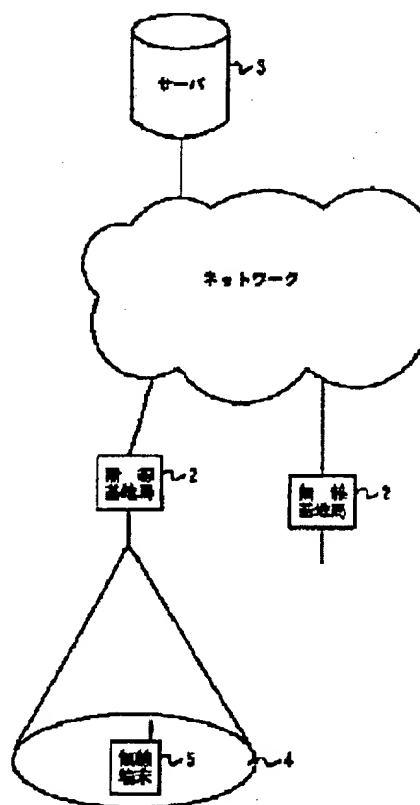
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Abstract of JP10079724

PROBLEM TO BE SOLVED: To conduct improvement control on a transmission characteristic of a transmission system at a radio base station more accurately, to make data reception stably at a radio terminal equipment, to improve the communication quality between the radio base station and the radio terminal equipment and to suppress a rapid packet error under multi-path fading environment in advance especially in the case of packet communication adopting an error correction code.

SOLUTION: A radio terminal equipment 5 is provided with a measurement means using an error correction code included in information data so as to measure number of bits whose error is corrected in the case of receiving and decoding information data sent from a radio base station 2 via a radio channel, and a notice means informing the measurement result by the measurement means to the radio base station 2. The radio base station 2 is provided with a means for feedback control of a transmission system to the radio terminal equipment 5 based on a state of a change in bit number for error correction noticed from the radio terminal equipment 5.



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Applicant: K.K. Toshiba

Inventors: K. Toshimitu et al

Title of the Invention: Wireless Communication System

Abstract:

What is aimed at by the present invention is to: let a wireless base station 2 improve transmission characteristics of the transmission system, thereby stabilizing the data reception at a selected wireless terminal station 5. Thus, the communication between the base station and the terminal station is improved in quality. Particularly in case of the packet transmission accompanying error-correcting codes such as CRC, a possible drastic increase of packet errors which is liable under the multi-path fading circumstances can be prevented anticipatively. Thus, the drastic deterioration of the quality of the transmission can be avoided.

The terminal station 5 comprises means to determine the number of the bits which are subjected to error-correction by using error-correcting codes, which are contained in the information or data transmitted from the base station 2 via the wireless channel; and means to inform the base station 2 of the so determined number of error-corrected bits. The base station 2 comprises means responsive to the signal representing the number of error-corrected bits from the terminal station 5 for effecting feed-back control on the base station side for instance, effectin channel switching, diversity transmission, increase of the transmission power etc. In case where the number of error-corrected bits gets close to the correction capability, the base station keeps watching how the number of error-corrected bits change for a predetermined period, effecting a most appropriate control on the basis of such watching result.